Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (CurrentlyAmended) A heterocycle-containing onium salt shown by the general formula [1] or [35]:

$$(R^1)m$$
 $R \longrightarrow S \longrightarrow A$
 $(R^2)n$

[wherein R is a group shown by the general formula [2]:

$$(R^3)i \qquad (R^4)j \qquad [2]$$

(wherein R^3 and R^4 are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or a lower an alkyl group having 1 to 6 carbon atoms as a substituent; X_2 is an oxygen atom or a sulfur atom; i is an integer of 0 to 4; and j is an integer of 0 to 3), or a group shown by the general formula [3]:

$$X_4 \qquad X_3 \qquad \qquad II \qquad \qquad [3]$$

$$(R^5)p \qquad (R^6)q \qquad \qquad [3]$$

(wherein R^5 and R^6 are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or a lower an alkyl group having 1 to 6 carbon atoms as a substituent; X_3 and X_4 are each independently an oxygen atom or a sulfur atom; p is an integer of 0 to 2; and q is an integer of 0

to 3); R^1 and R^2 are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or a lower an alkyl group having 1 to 6 carbon atoms as a substituent; m and n are each independently an integer of 0 to 5; and A is a halogen atom or an anion derived from an inorganic strong acid, an organic acid or a compound shown by the general formula [4]: $HM_1(R^7)_4$ [4]

(wherein M_1 is a boron atom or a gallium atom; and R^7 is an aryl group which may have a substituent selected from a lower haloalkyl group having 1 to 6 carbon atoms, a halogen atom, a nitro group and a cyano group)],

$$R^{26}$$
 $\stackrel{\bigoplus}{--}$ R^{27} A_3 [35]

[wherein R²⁶ and R²⁷ are each independently an aryl group which may have a halogen atom or a lower an alkyl group having 1 to 6 carbon atoms as a substituent, a group shown by the above-mentioned general formula [2], or a group shown by the above-mentioned general formula [3]; A₃ is a halogen atom or an anion derived from an inorganic strong acid, an organic acid or a compound shown by the general formula [4]; and provided that at least one of R²⁶ and R²⁷ is a group shown by the above-mentioned general formula [2] or [3], and when only one of R²⁶ and R²⁷ is a group shown by the above-mentioned general formula [2] or [3], A₃ is an anion derived from an inorganic strong acid shown by the general formula [36];

$$HM_3F_6$$
 [36]

(wherein M_3 is a phosphorus atom, an arsenic atom or an antimony atom), an organic acid or a compound shown by the general formula [4]].

2. (Currently Amended) An onium salt according to claim 1, wherein the heterocycle-containing onium salt is one shown by the general formula [1]:

$$(R^1)m$$
 $R - S \oplus A$
 $(R^2)n$

[wherein R is a group shown by the general formula [2]:

$$(R^3)i \qquad (R^4)j \qquad [2]$$

(wherein R^3 and R^4 are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or a lower an alkyl group having 1 to 6 carbon atoms as a substituent; X_2 is an oxygen atom or a sulfur atom; i is an integer of 0 to 4; and j is an integer of 0 to 3), or a group shown by the general formula [3]:

$$X_4 \longrightarrow X_3 \longrightarrow \boxed{\parallel}$$

$$(R^5)p \qquad (R^6)q \qquad [3]$$

(wherein R⁵ and R⁶ are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or an alkyl group having 1 to 6 carbon atoms as a substituent; X₃ and X₄ are each independently an oxygen atom or a sulfur atom; p is an integer of 0 to 2; and q is an integer of 0 to 3); R¹ and R² are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or an alkyl group having 1 to 6 carbon atoms as a substituent; m and n are each independently an integer of 0 to 5; and A is a halogen atom or an anion derived from an inorganic strong acid, an organic acid or a compound shown by the general formula [4]:

$$HM_1(R^7)_4$$
 [4]

(wherein M_1 is a boron atom or a gallium atom; and R^7 is an aryl group which may have a substituent selected from a haloalkyl group having 1 to 6 carbon atoms, a halogen atom, a nitro group and a cyano group)].

3. (Currently Amended) An onium salt according to claim 1, wherein the heterocycle-containing onium salt is one shown by the general formula [35]:

$$R^{26}$$
— $\stackrel{\odot}{I}$ — R^{27} A_3 [35]

[wherein R²⁶ and R²⁷ are each independently an aryl group which may have a halogen atom or a lower an alkyl group having 1 to 6 carbon atoms as a substituent, a group shown by the general formula [2];

$$(R^3)i \qquad (R^4)j \qquad [2]$$

(wherein R^3 and R^4 are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or a lower an alkyl group having 1 to 6 carbon atoms as a substituent; X_2 is an oxygen atom or a sulfur atom; i is an integer of 0 to 4; and j is an integer of 0 to 3), or a group shown by the general formula [3]:

$$X_4 \longrightarrow X_3 \longrightarrow \boxed{1}$$

$$(R^5)p \qquad (R^6)q \qquad [3]$$

(wherein R^5 and R^6 are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or a lower an alkyl group having 1 to 6 carbon atoms as a substituent; X_3 and X_4 are each independently an oxygen atom or a sulfur atom; p is an integer of 0 to 2; and q is an integer of 0 to 3); A_3 is a halogen atom, or an anion derived from an inorganic strong acid, an organic acid or a compound shown by the general formula [4]:

$$HM_1(R^7)_4$$
 [4]

(wherein M_1 is a boron atom or a gallium atom; and R^7 is an aryl group which may have a substituent selected from a lower haloalkyl group having 1 to 6 carbon atoms, a halogen atom, a nitro group and a cyano group); and provided that at least one of R^{26} and R^{27} is a group shown by the above-mentioned general formula [2] or [3], and when only one of R^{26} and R^{27} is a group shown by the above-mentioned general formula [2] or [3], A_3 is an anion derived from an inorganic strong acid shown by the general formula [36]:

$$HM_3F_6$$
 [36]

(wherein M_3 is a phosphorous atom, an arsenic atom or an antimony atom), an organic acid, or a compound shown by the general formula [4])].

4. (Original) A salt according to claim 2, wherein the anion derived from an inorganic strong acid, shown by A is one derived from nitric acid, sulfuric acid, halosulfuric acid, perhalogenic acid or a compound shown by the general formula [5]:

$$HM_2F_k$$
 [5]

(wherein M₂ is a metalloid atom or a metal atom; and k is an integer of 4 or 6).

- 5. (Original) A salt according to claim 4, wherein the metalloid atom shown by M_2 is a boron atom, a silicon atom, a phosphorus atom, an arsenic atom or an antimony atom; and the metal atom shown by M_2 is an aluminum atom, a titanium atom, an iron atom, a nickel atom, a zirconium atom or a gallium atom.
- 6. (Original) A salt according to claim 2, wherein the anion derived from the organic acid shown by A is one derived from a sulfonic acid shown by the general formula [6]:

$$R^8$$
— SO_3H [6]

(wherein R⁸ is an alkyl group, an aryl group or an aralkyl group, which may have a halogen atom), or a carboxylic acid shown by the general formula [7]:

(wherein R⁹ is an alkyl group, an aryl group or an aralkyl group, which may have a halogen atom).

- 7. (Original) A salt according to claim 2, wherein R is a group shown by the general formula [2].
- 8. (Original) A salt according to claim 7, wherein X_2 in the general formula [2] is an oxygen atom.
- 9. (Original) A salt according to claim 7, wherein the group shown by the general formula [2] is a xanthonyl group.

- 10. (Original) A salt according to claim 2, wherein R is a group shown by the general formula [3].
- 11. (Original) A salt according to claim 10, wherein each X_3 and X_4 in the general formula [3] is an oxygen atom.
- 12. (Original) A salt according to claim 10, wherein the group shown by the general formula [3] is a coumarinyl group.
- 13. (Original) A salt according to claim 2, wherein the sulfonium salt shown by the general formula [1] is diphenyl(xanthene-9-one-2-yl)sulfonium hexafluorophosphate or (coumarin-7-yl)diphenylsulfonium hexafluorophosphate.
- 14. (Original) A salt according to claim 3, wherein the anion derived from the inorganic strong acid shown by A₃ is one derived from nitric acid, sulfuric acid, halosulfuric acid, perhalogenic acid or an inorganic strong acid shown by the general formula [5]:

 HM_2F_k [5]

(wherein M_2 is a metalloid atom or a metal atom; and k is an integer of 4 or 6).

- 15. (Original) A salt according to claim 14, wherein the metalloid atom shown by M_2 is a boron atom, a silicon atom, a phosphorus atom, an arsenic atom or an antimony atom; and the metal atom shown by M_2 is an aluminum atom, a titanium atom, an iron atom, a nickel atom, a zirconium atom or a gallium atom.
- 16. (Original) A salt according to claim 3, wherein the anion derived from the organic acid shown by A_3 is one derived from a sulfonic acid shown by the general formula [6]:

$$R^8$$
— SO_3H [6]

(wherein R⁸ is an alkyl group, an aryl group or an aralkyl group, which may have a halogen atom), or a carboxylic acid shown by the general formula [7]:

(wherein R⁹ is an alkyl group, an aryl group or an aralkyl group, which may have a halogen atom).

- 17. (Original) A salt according to claim 3, wherein each R²⁶ and R²⁷ is a group shown by the general formula [2].
- 18. (Original) A salt according to claim 17, wherein X_2 in the general formula [2] is an oxygen atom.
- 19. (Original) A salt according to claim 17, wherein the group shown by the general formula [2] is a xanthonyl group.
- 20. (Original) A salt according to claim 3, wherein each R^{26} and R^{27} is a group shown by the general formula [3].
- 21. (Original) A salt according to claim 20, wherein each X_3 and X_4 in the general formula [3] is an oxygen atom.
- 22. (Original) A salt according to claim 20, wherein the group shown by the general formula [3] is a coumarinyl group.
- 23. (Original) A salt according to claim 3, wherein the iodonium salt shown by the general formula [35] is bis(xanthene-9-one-2-yl)iodonium hexafluorophosphate or bis(coumarin-7-yl)iodonium hexafluorophosphate.

24. (Currently Amended)

A cationic photopolymerization initiator comprising a heterocycle-containing onium salt shown by the general formula [8]:

$$(R^1)m$$
 $R \longrightarrow G$
 A_1 [8]
 $(R^2)n$

[wherein R is a group shown by the general formula [2]:

$$(R^3)i \qquad (R^4)j \qquad [2]$$

(wherein R^3 and R^4 are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or a lower an alkyl group having 1 to 6 carbon atoms as a substituent; X_2 is an oxygen atom or a sulfur atom; i is an integer of 0 to 4; and j is an integer of 0 to 3), or a group shown by the general formula [3]:

$$\begin{array}{c} X_4 \\ X_3 \\ \hline \\ (R^5)p \end{array} \qquad [3]$$

(wherein R^5 and R^6 are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or a lower an alkyl group having 1 to 6 carbon atoms as a substituent; X_3 and X_4 are each independently an oxygen atom or a sulfur atom; p is an integer of 0 to 2; and q is an integer of 0 to 3); R^1 and R^2 are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or a lower an alkyl group having 1 to 6 carbon atoms as a substituent; m and n are each independently an integer of 0 to 5; and A_1 is an anion derived from an inorganic strong acid, a sulfonic acid or a compound shown by the general formula [4]:

 $HM_1(R^7)_4$ [4]

(wherein M_1 is a boron atom or a gallium atom; R^7 is an aryl group which may have a substituent selected from a lower haloalkyl group having 1 to 6 carbon atoms, a halogen atom, a nitro group and a cyano group)].

25. (Original) A polymerization initiator according to claim 24, wherein A_1 is an anion derived from the compound shown by the general formula [4] or an inorganic strong acid shown by the general formula [5]:

 HM_2F_k [5]

(wherein M_2 is a metalloid atom or a metal atom; and k is an integer of 4 or 6).

26. (Original) A polymerization initiator according to claim 24, wherein the sulfonium salt shown by the general formula [8] is diphenyl(xanthene-9-one-2-yl)sulfonium hexafluorophosphate or (coumarin-7-yl)diphenylsulfonium hexafluorophosphate.

27. (Currently Amended)

A cationic photopolymerization initiator comprising a heterocycle-containing iodonium salt shown by the general formula [37]:

$$R^{26}$$
— $\stackrel{\bigoplus}{I}$ — R^{27} A_4 [37]

[wherein R²⁶ and R²⁷ are each independently an aryl group which may have a halogen atom or a lower an alkyl group having 1 to 6 carbon atoms as a substituent, a group shown by the general formula [2]:

$$(R^3)i \qquad (R^4)j \qquad [2]$$

(wherein R^3 and R^4 are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or a lower an alkyl group having 1 to 6 carbon atoms as a substituent; X_2 is an oxygen atom or a sulfur atom; i is an integer of 0 to 4; and j is an integer of 0 to 3), or a group shown by the general formula [3]:

$$X_4 \qquad X_3 \qquad \qquad [3]$$

$$(R^5)p \qquad (R^6)q \qquad \qquad [3]$$

(wherein R^5 and R^6 are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or a lower an alkyl group having 1 to 6 carbon atoms as a substituent; X_3 and X_4 are each independently an oxygen atom or a sulfur atom; p is an integer of 0 to 2; and q is an integer of 0 to 3); and A_4 is an anion derived from an inorganic strong acid, a sulfonic acid or a compound shown by the general formula [4]:

$$HM_1(R^7)_4$$
 [4]

(wherein M_1 is a boron atom or a gallium atom; R^7 is an aryl group which may have a substituent selected from a lower haloalkyl group having 1 to 6 carbon atoms, a halogen atom, a nitro group and a cyano group); and provided that at least one of R^{26} and R^{27} is a group shown by the abovementioned general formula [2] or [3], and when only one of R^{26} and R^{27} is a group shown by the above-mentioned general formula [2] or [3], an inorganic strong acid is one shown by the general formula [36]:

$$HM_3F_6$$
 [36]

(wherein M₃ is a phosphorus atom, an arsenic atom or an antimony atom)].

28. (Original) A polymerization initiator according to claim 27, wherein A_4 is an anion derived from the compound shown by the general formula [4] or an inorganic strong acid shown by the general formula [5]:

$$HM_2F_k$$
 [5]

(wherein M_2 is a metalloid atom or a metal atom; and k is an integer of 4 or 6).

- 29. (Original) A polymerization initiator according to claim 27, wherein the iodonium salt shown by the general formula [37] is bis(xanthene-9-one-2-yl)iodonium hexafluorophosphate or bis(coumarin-7-yl)iodonium hexafluorophosphate.
- 30. (Original) A method for polymerization of an epoxy monomer, which comprises using the polymerization initiator in claim 24.

- 31. (Original) A method for polymerization of a vinyl ether monomer, which comprises using the polymerization initiator in claim 24.
- 32. (Original) A method for polymerization of an epoxy monomer, which comprises using the polymerization initiator in claim 27.
- 33. (Original) A method for polymerization of a vinyl ether monomer, which comprises using the polymerization initiator in claim 27.
- 34. (Currently Amended) An acid generator for a resist, comprising a sulfonium salt shown by the general formula [9]:

$$(R^1)m$$
 $R \longrightarrow G$
 A_2
 $(R^2)n$

[wherein R is a group shown by the general formula [2]:

$$(R^3)i \qquad (R^4)j \qquad [2]$$

(wherein R^3 and R^4 are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or a lower an alkyl group having 1 to 6 carbon atoms as a substituent; X_2 is an oxygen atom or a sulfur atom; i is an integer of 0 to 4; and j is an integer of 0 to 3), or a group shown by the general formula [3]:

$$X_4$$

$$X_3$$

$$R^5)p$$

$$R^6)q$$
[3]

(wherein R^5 and R^6 are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or a lower an alkyl group having 1 to 6 carbon atoms as a substituent; X_3 and X_4 are each independently an oxygen atom or a sulfur atom; p is an integer of 0 to 2; and q is an integer of 0 to 3); R^1 and R^2 are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or a lower an alkyl group having 1 to 6 carbon atoms as a substituent; m and n are each independently an integer of 0 to 5; and A_2 is an anion derived from an inorganic strong acid, an organic acid or a compound shown by the general formula [4]:

$$HM_1(R^7)_4$$
 [4]

(wherein M_1 is a boron atom or a gallium atom; and R^7 is an aryl group which may have a substituent selected from a lower haloalkyl group having 1 to 6 carbon atoms, a halogen atom, a nitro group and a cyano group)].

- 35. (Original) An acid generator according to claim 34, wherein the sulfonium salt shown by the general formula [9] is diphenyl(xanthene-9-one-2-yl)sulfonium hexafluorophosphate or (coumarin-7-yl)diphenylsulfonium hexafluorophosphate.
- 36. (Currently Amended) An acid generator for a resist, comprising an iodonium salt shown by the general formula [38]:

$$R^{26}$$
 $\stackrel{\bigoplus}{---}$ R^{27} A_5 [38]

[wherein R²⁶ and R²⁷ are each independently an aryl group which may have a halogen atom or a lower an alkyl group having 1 to 6 carbon atoms as a substituent, a group shown by the general formula [2]:

$$(R^3)_i \qquad (R^4)_j \qquad [2]$$

(wherein R^3 and R^4 are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or a lower an alkyl group having 1 to 6 carbon atoms as a substituent; X_2 is an oxygen atom or a

sulfur atom; i is an integer of 0 to 4; and j is an integer of 0 to 3), or a group shown by the general formula [3]:

$$\begin{array}{c} X_4 \\ X_3 \\ R^5)p \end{array} \qquad [3]$$

(wherein R^5 and R^6 are each independently a halogen atom, an alkyl group which may have a halogen atom or an aryl group as a substituent, or an aryl group which may have a halogen atom or a lower an alkyl group having 1 to 6 carbon atoms as a substituent; X_3 and X_4 are each independently an oxygen atom or a sulfur atom; p is an integer of 0 to 2; and q is an integer of 0 to 3); and A_5 is an anion derived from an inorganic strong acid, an organic acid or a compound shown by the general formula [4]:

$$HM_1(R^7)_4$$
 [4]

(wherein M_1 is a boron atom or a gallium atom; and R^7 is an aryl group which may have a substituent selected from a lower haloalkyl group having 1 to 6 carbon atoms, a halogen atom, a nitro group and a cyano group); and provided that at least one of R^{26} and R^{27} is a group shown by the above-mentioned general formula [2] or [3], and when only one of R^{26} and R^{27} is a group shown by the above-mentioned general formula [2] or [3], an inorganic strong acid is one shown by the general formula [36]:

$$HM_3F_6$$
 [36]

(wherein M₃ is a phosphorus atom, an arsenic atom or an antimony atom)].

37. (Original) An acid generator according to claim 36, wherein the iodonium salt shown by the general formula [38] is bis(xanthene-9-one-2-yl)iodonium hexafluorophosphate or bis(coumarin-7-yl)iodonium hexafluorophosphate.